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One of a series of studies based on data collected from 1,844 eleventh and twelfth grade Canadian students, this study examined to what extent type of residence was an important factor in student aspirations and other social factors. Farm, rural non-farm, and suburban youth were compared in order to study their degree of exposure to a variety of social experiences and their motivation. It was hypothesized that (1) the more urban the youth the greater their exposure to a diversity of social experiences, (2) the more urban the youth the higher their motivations, and (3) the greater the exposure to a diversity of social experiences the higher the motivations. Statistical analysis of data collected by means of questionnaires indicated that the first 2 hypotheses could be accepted. The data did not permit the testing of the third hypothesis. Statistical data and tables illustrate the findings. Related documents are RC 003 187, RC 003 188, and RC 003 293. (SW)

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# *Some Rural-Urban Differences Between Manitoba High School Students*

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FACULTY OF AGRICULTURE AND HOME ECONOMICS

UNIVERSITY OF MANITOBA
WINNIPEG 19 CANADA

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# SOME RURAL-URBAN DIFFERENCES BETWEEN MANITOBA HIGH SCHOOL STUDENTS

by

Leonard Siemens
Faculty of Agriculture and Home Economics

and

Leo Driedger
Canadian Mennonite Bible College

The material reported in this study represents but a portion of a larger research project undertaken by the A. R. D. A. Research Committee, Manitoba Department of Agriculture and Conservation, and the Faculty of Agriculture and Home Economics, University of Manitoba.

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The Faculty of Agriculture and Home Economics
University of Manitoba
Winnipeg, Manitoba

December, 1965

## FOREWORD

This is but one in a series of reports dealing with different aspects of educational attainment, or lack thereof, of a group of Manitoba High School Youth.

Current interest in high school students, particularily their educational and occupational aspirations, stems from a broader interest in social change. Clearly the underlying assumption is that the higher the level of education the better prepared our youth will be to cope with the technological and social changes taking place.

These studies provide us with empirical facts about educational and occupational aspirations of Manitoba youth. This particular report compares some rural and urban differences.

These facts are being provided for the benefit of our "social engineers" who have the difficult job of designing action programs that equip our people to cope with the rapidly changing conditions of our society.

G. Albert Kristjanson,
Assistant Director,
Economics and Publications Branch,
Manitoba Department of
Agriculture and Conservation

## REPORTS IN THIS SERIES

Leonard B. Siemens

*The Influence of Selected Family Factors on the Educational and Occupational Aspiration Levels of High School Boys and Girls.* Winnipeg: Faculty of Agriculture and Home Economics, University of Manitoba, Number One, June, 1965.

Leonard B. Siemens and J.E. Winston Jackson

*Educational Plans and Their Fulfillment: A Study of Selected High School Students in Manitoba.* Winnipeg: Faculty of Agriculture and Home Economics, University of Manitoba, Number Two, September, 1965.

Dennis P. Forcese and Leonard B. Siemens

*School-Related Factors and the Aspiration Levels of Manitoba Senior High School Students.* Winnipeg: Faculty of Agriculture and Home Economics, University of Manitoba, Number Three, September, 1965.

Leonard B. Siemens and Leo Driedger

*Some Rural-Urban Differences Between Manitoba High School Students.* Winnipeg: Faculty of Agriculture and Home Economics, University of Manitoba, Number Four, December, 1965.

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The authors assume full responsibility for any errors which might appear in this report.

Leo Driedger

Leonard B. Siemens

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# CHAPTER I

## INTRODUCTION

The preceding three reports in this series based on data collected from 1844 High School youth in grades eleven and twelve from the Manitoba Interlake, Central Plains and Suburban areas, revealed important relationships between student aspirations and other social factors.[1] The extent to which type of residence is an important factor in Manitoba must be explored and compared with preceding research.

### The Problem

In studies of rural-urban types of residence some scholars have compared farm, rural, non-farm and urban homes. Other studies are based on a farm-non-farm dichotomy and still others on a rural-urban dichotomy. A three-way comparison between farm,

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[1] Leonard B. Siemens, The Influence of Selected Family Factors on the Educational and Occupational Aspiration Levels of High School Boys and Girls. Winnipeg: Faculty of Agriculture and Home Economics, University of Manitoba, No. 1, June, 1965; Leonard B. Siemens and J. E. Jackson, Educational Plans and Their Fulfillment: A Study of Selected High School Students in Manitoba. Winnipeg: Faculty of Agriculture and Home Economics, University of Manitoba, No. 2, September, 1965; Dennis P. Forcese and Leonard B. Siemens, School-Related Factors and the Aspiration Levels of Manitoba Senior High School Students. Winnipeg: Faculty of Agriculture and Home Economics, University of Manitoba, No. 3, September, 1965.

rural non-farm and suburban youth will be made in this study.[2] The suburban category must be used instead of the urban category because sufficient representation from other parts of cities could not be obtained.

It will be the objective of this study to:

1) Find out whether there are significant differences between farm, rural non-farm and suburban youth in this sample.

2) Isolate the variables around which these differences revolve.

3) Compare these differences with a number of U.S.A. studies to see whether Canadian and American rural-urban differences are the same.

4) Seek to summarize some of these variables into meaningful categories such as a) exposure to diversity of social experience, and b) student motivation.

Rural-Urban Studies

A fine comparison of urban-rural studies in the United States is made by Burchinal, Haller and Taves.[3] Comparisons of urban-rural differences in Canada are sparse, so that many more studies are needed to indicate whether the findings in the United States also hold true for Canada.

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[2]All high school students living in the open country with fathers engaged in farming are designated as farm; students whose fathers were engaged in occupations other than farming, and living in the open country, in villages and towns of populations below 2500 are designated as non-farm; students living in places with over 2500 population are referred to as suburban. Type of residence will refer to youth living in one of these three places.

[3]Lee G. Burchinal, Archibald O. Haller and Marvin J. Taves, Career Choices of Rural Youth in a Changing Society. University of Manitoba, Agriculture Experiment Station Bulletin 458, 1962.

Haller, Burchinal and Middleton, for example, found that lower educational and occupational aspiration levels were associated with rurality.[4] Burchinal, Slocum and Sewell found relationships between type of residence and intellectual ability, socio-economic status and education of parents.[5] Sewell suggests explanations for some of these trends saying that this is related to values of the community or family. Hathaway and Haller found that the self-concept of farm youth varied from that of urban youth in that farm youth expressed feelings of shyness, self-depreciation and submissiveness more often than urban youth.[6]

To see whether some of these American findings apply in Canada, an attempt is made in this study to group some of the variables into categories so that some comparisons might be made, especially as it relates to type of residence.

Research done so far, suggests the need to study (1) exposure to a diversity of social experience, and (2) factors related to motivations of youth. The previous three reports in this series have established

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[4]A.O. Haller and C.E. Wolff, "Personality Orientation of Farm, Village and Urban Boys". Rural Sociology, 1962, 27: 275-293; Lee G. Burchinal, "Differences in Educational and Occupational Aspirations of Farm, Small-town and City Boys". Rural Sociology, 1961, 26: 107-121; R. Middleton and C.M. Grigg, "Rural-Urban Differences in Aspirations". Rural Sociology, 1959, 24: 347-354.

[5]Lee G. Burchinal, op. cit., pp. 107-121; W.L. Slocum, "Occupational and Educational Plans of High School Seniors from Farm and Nonfarm Homes". Washington Agricultural Station Bulletin, 564, 1956; W.H. Sewell, "Community of Residence and College Plans", American Sociological Review, 1962, 27: 521-23.

[6]S.R. Hathaway, E.P. Manachesi, and L.A. Young, "Rural-Urban Adolescent Personality", Rural Sociology, 1959, 24: 331-346; Haller and Wolff, op. cit., pp. 275-293.

differences in aspirations, school drop-outs, socio-economic status, education, intelligence, etc. In this report a summary of underlying factors related to type of residence will be attempted.

## Research Setting and Methodology

Three sample areas were selected for this study. Figure 1 includes a map showing (1) the Interlake, (2) the Central Plains, and (3) the Suburban areas where 1844 grade eleven and twelve high school students from twenty-eight schools were questioned.[7] The Interlake and Central Plains areas are rural, with the former a relatively depressed area, and the latter area much more prosperous.[8] The Central Plains area includes a number of trade centers such as MacGregor, Carberry, Neepawa, and Gladstone. Schools in the suburban areas were selected from municipalities of metropolitan Winnipeg. The selection was not random, but rather sampled to achieve area representation and socio-economic variations.

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[7] A listing of the twenty-eight schools by regions, enrollment, questionnaires completed and totals is given in Siemens, op. cit., p. 127.

[8] For a good description and thorough study of the Interlake region see Lowry Nelson, Area Development in the Interlake: Problems and Proposals. Winnipeg: Queen's Printer for Manitoba, 1964. For more details on methodology see also reports one and two in this series by Siemens, op. cit., pp. 45-56 and Siemens and Jackson, op. cit., pp. 4-11 respectively.

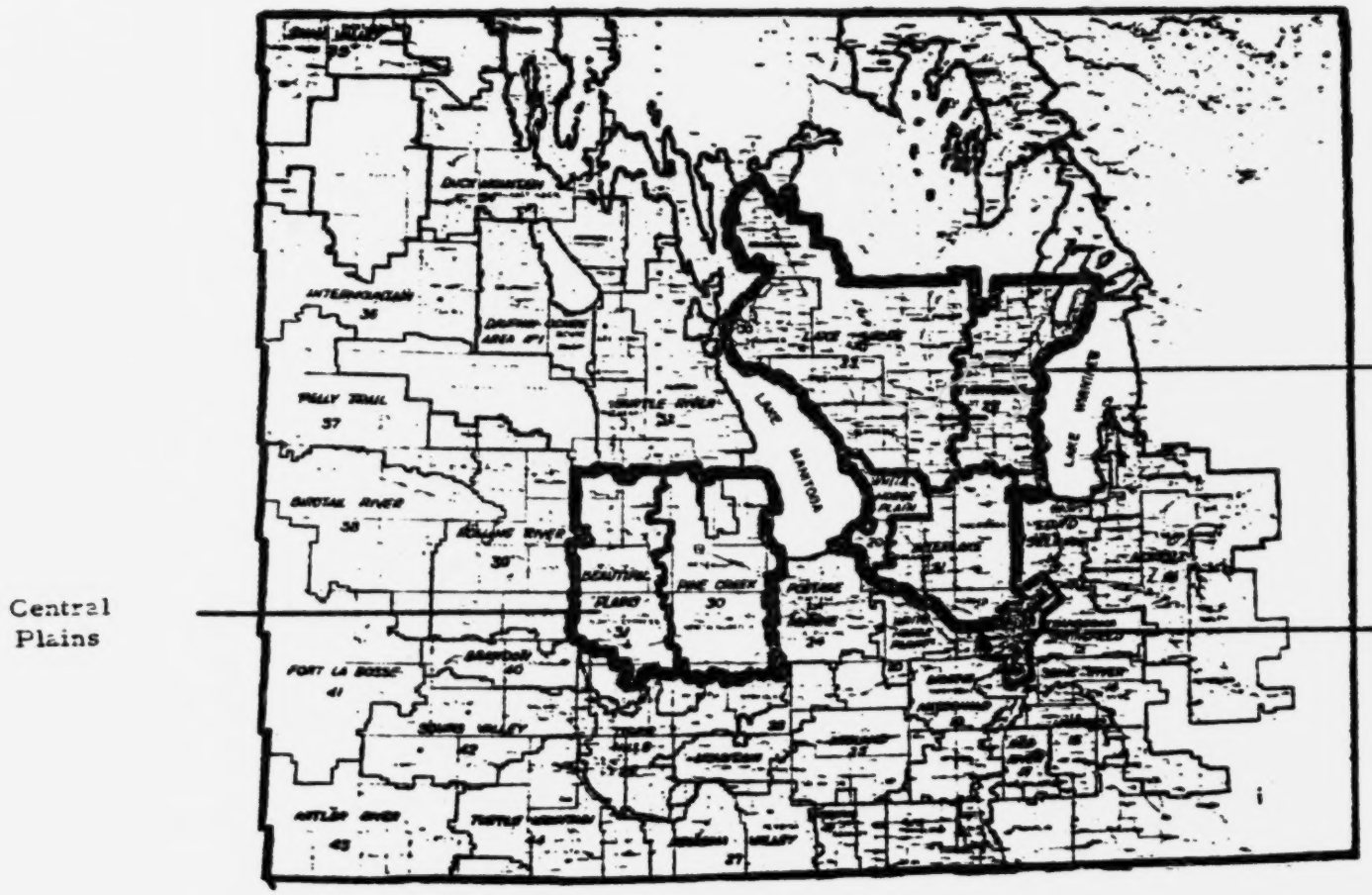


**Figure 1**

**Southern Portion of Manitoba Outlining (Heavy Lines) the Three Survey Areas**

The data were collected by questionnaires administered in individual classrooms in the respective schools.[9] Eighty-eight per cent of the questionnaires administered were completed and handed in. The 1844 questionnaires returned included 987 male and 857 female senior high school students.

## Hypotheses

To focus the problem, three hypotheses were developed to facilitate the testing of some of these social exposure and motivational variables related to type of residence.

Burchinal and associates conclude that urban youth are exposed to conditions which prepare them to function better than rural youth in the urban-industrial society.[10] To test this the following hypothesis was developed.

Hypothesis 1: The more urban the youth the greater their exposure to a diversity of social experience.

Factors selected to determine exposure to social diversity will be discussed later.[11] If exposure is of importance, then youth could be influenced by moving to more or less dense population areas

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[9] The complete twenty page questionnaire is included in the first report, Siemens, op. cit., pp. 106-125.

[10] Burchinal, Haller and Taves, op. cit.

[11] Socio-economic status, number of schools attended, father's education, mother's education, and work away from home are some of the indicators of social exposure which will be used.

depending on what outcome is desired, or more urban features could be brought to rural areas. Certain ethnic groups desire a minimum of exposure to protect against what they consider to be undesirable influences. Other groups tend to encourage exposure.

What the underlying factors may be which tend to support high aspirations, high intelligence and a favorable self-concept are of considerable interest.[12] A second hypothesis relates type of residence to student motivational factors.

Hypothesis 2: The more urban the youth the higher their motivations. Factors selected to determine motivations will be discussed later.[13]

A third hypothesis linking social exposure and motivations would be a natural sequence to the first two.

Hypothesis 3: The greater the exposure to a diversity of social experience, the higher the motivations.

Unfortunately the data do not permit the testing of such a hypothesis. Several of the strongest factors under exposure (socio-economic status, and father's and mother's education) will be compared with several of the more significant motivational factors (I.Q. and educational aspirations) however.

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[12] This study does not claim to search for causes, but factors related to motivations.

[13] I.Q., educational aspirations, marks, self leadership rating and occupational aspirations are some of the indicators of motivation which will be used.

Variables and Categories

To examine the degree of exposure to a variety of social experience, variables from (1) the home, (2) the school, and (3) the work of youth were selected. Table I summarizes the seven variables which were selected.

To study the motivations of youth, variables related to (1) ability, (2) self-concept, and (3) aspirations were selected. The five variables under these areas are also listed in Table I.

TABLE I

Categories of Variables to be Tested for Relationship to Type of Residence

| | | |
|---|---|---|
| SOCIAL EXPERIENCE | The Home | 1. Socio-economic Status<br>2. Father's Education<br>3. Mother's Education |
| | The School | 4. Number of Public Schools Attended<br>5. Number of High Schools Attended |
| | At Work | 6. Work Away from Home<br>7. Summer Employment |
| MOTIVATIONS | Ability | 8. Intelligence Quotient<br>9. Marks in School |
| | Self-Concept | 10. Leadership Ability |
| | Aspirations | 11. Educational Aspirations<br>12. Occupational Aspirations |

Exposure to Social Experience. A brief rationale for the selection of the variables related to the home, the school and at work will be given.

The socio-economic status, which included the presence or absence of a newspaper, T.V., record player, telephone, automobile and similar conveniences in the home are good indicators of exposure to news, information, communication, music and mobility. Education is presumably also an accumulation of information and exposure to society, so that the education of the parents would influence youth in the home. The three variables, socio-economic status, father's and mother's education were considered typical indicators of social experiences in the home.

School exposure such as the number of schools attended would add to diversity of social experience. The child who attended three schools during his public school days would need to make new friends, be exposed to more teachers, and more new situations than the child who attended only one. The same would hold true for the number of high schools attended. The degree of extra curricular activity would be an important variable to include, but the data were not available. The number of public and high schools attended were used to determine diversity of school exposure.

Although youth spend more time at home and at school than at work, a large number do work part time while in school, as well as work in summer either part or full time. Those who worked away from home

needed to make new social contacts, learn new skills, and interact with society so that this was conceived as exposure to social experience. Work away from home and summer employment were the work indicators used.

Motivations of Youth. The variables related to student ability, self concept, and aspirations all pointed in the direction of student motivation. The term motivation is used to include some variables which create incentives or drives to act in a certain direction. Some of the stimuli which create a response from youth are considered here.

Both I.Q. scores and school marks have been severely criticized as indicators of ability, but few better alternatives have been found. I.Q. seems to include inherent potential ability, or accumulated knowledge, or both of these, which is a factor in student motivation. The student who makes good marks in school seems to also be motivated toward positive goals. Intelligence quotient and mean high school marks were used as indicators of ability.

Students were asked to rank themselves on leadership ability. Those who ranked themselves high were believed to be more confident and more aggressive so that their concept of themselves was higher. Other variables are needed to develop self concept, but the data did not allow for this.

The educational and occupational aspirations were also used as indicators of motivation. Students aspiring to enter university study were listed as highly motivated compared to those who did not plan to continue education. Those who aspired to professional occupations were also listed as highly motivated.

## CHAPTER II

## ANALYSIS OF DATA

Analysis of the data will be related to the three hypotheses, and discussed in the following order: (1) type of residence and exposure to social experience, (2) type of residence and factors related to motivation, and (3) some relationships between exposure to social experience and motivational factors.

### A. Exposure to Social Experience

The seven factors considered under social exposure will be discussed under three groupings: (1) the home, (2) the school, and (3) at work.

1. The Home - The three factors selected to determine influence of the home were (1) socio-economic status, (2) father's education, and (3) mother's education. Figures 2, 3 and 4 show a strong relationship between type of residence and the three selected factors.

Farm youth tended to be of lower economic status than suburban youth, and less exposed to information, mobility and communication media.[1] About half of the farm youth ranked low on economic-status

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[1] Figure 2. $X^2 = 394.74$; D/F = 4; $P < .001$; $C = .51750$. See appendix, Table V for more details. All correlation coefficients are corrected so comparisons between C's can be made.

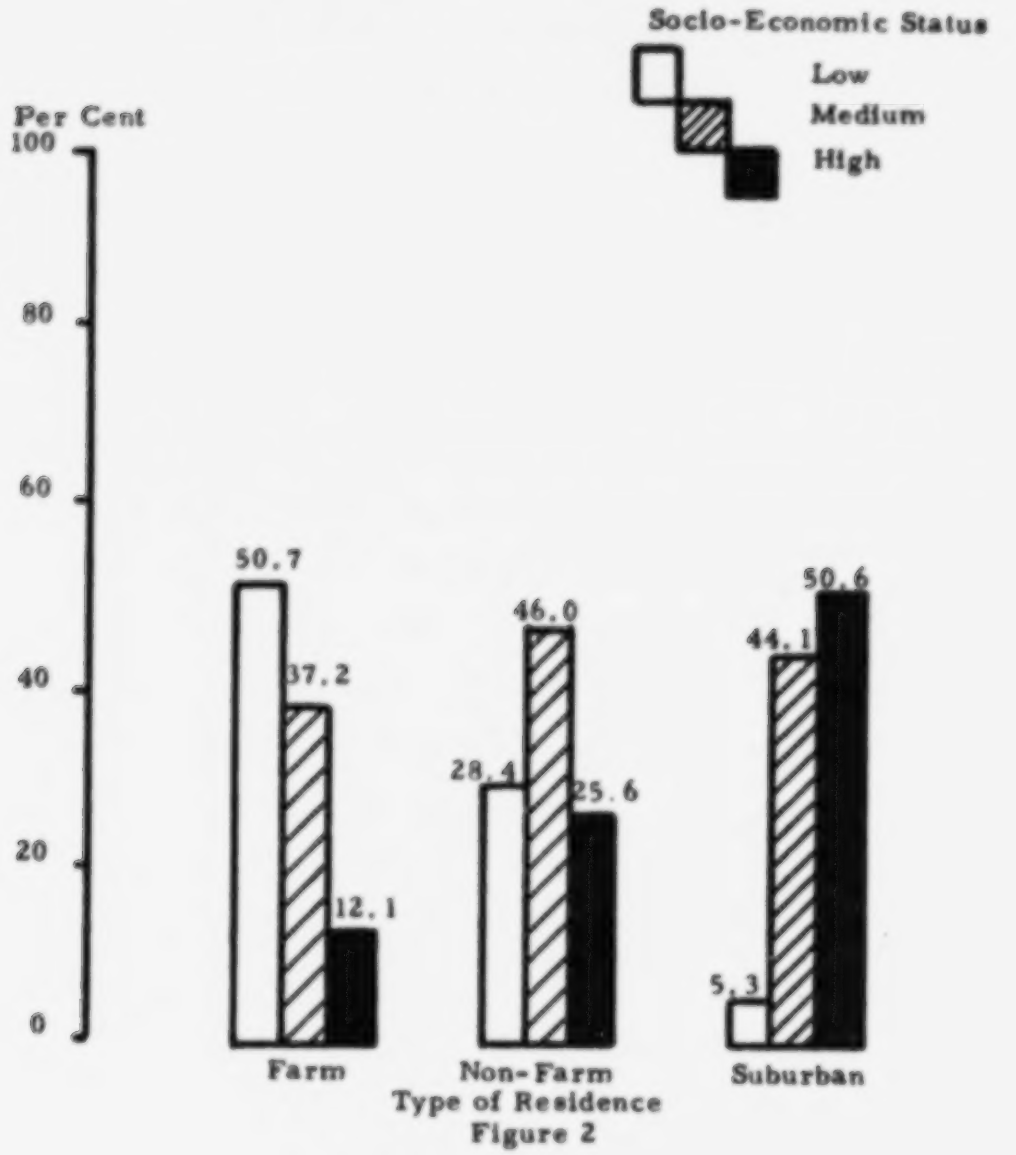


Figure 2

Socio-Economic Status of High School Youth by Type of Residence

and only about one-eighth were high, whereas urban youth were reversed with almost none of low status. Rural non-farm youth were about equally represented in the low and high categories.

The education of fathers and mothers of Manitoba youth were additional factors found to be strongly related to type of residence. Over two-thirds of the farm fathers had completed grade eight or less, and almost none had studied beyond high school.[2] On the other hand somewhat over half of the suburban fathers had attended or were graduates of high school, and one-fifth had studied beyond high school. Three times as many farm fathers as suburban fathers had not gone to high school.

The mother's education showed similar trends, although farm mothers had gone to school more than farm fathers, and suburban mothers had not gone to school quite as much as suburban fathers.[3] The range of education of mothers was not as great as that of fathers. Nevertheless, there were significant relationships between the education of parents and type of residence.[4] Farm parents had acquired less education, and suburban parents had gone to school more, while rural non-farm parents ranked between these two.

---

[2]Figure 3. For more details see Table VI in the appendix.

[3]Figure 4. For more details see Table VII in the appendix.

[4] $X^2 = 316.07$; $D/F = 4$; $P < .001$; $\bar{C} = .47360$ for father's education, and
$X^2 = 163.37$; $D/F = 4$; $P < .001$; $\bar{C} = .35224$ for mother's education.

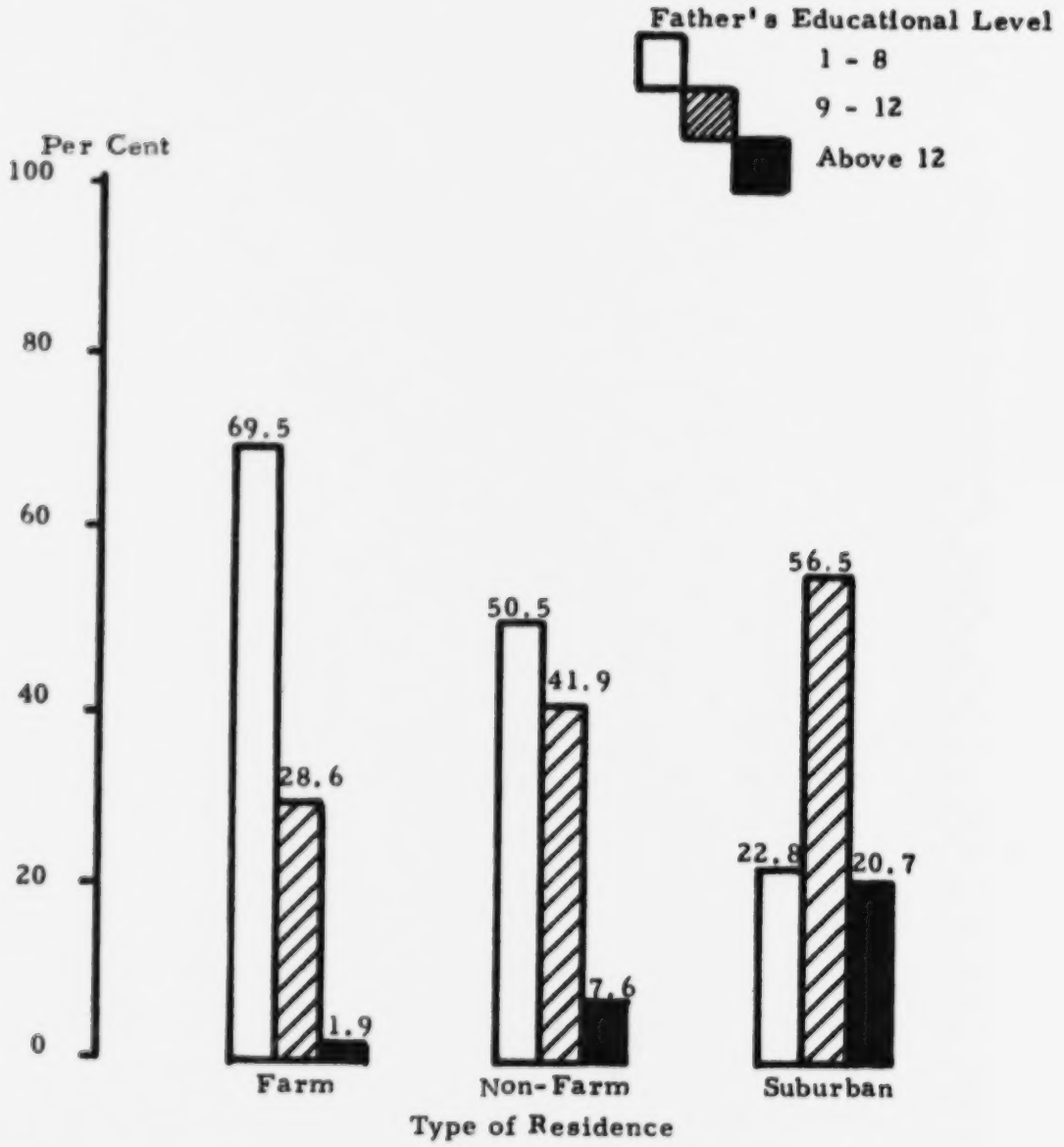


Figure 3

Educational Level of Fathers of High School Youth by Type of Residence

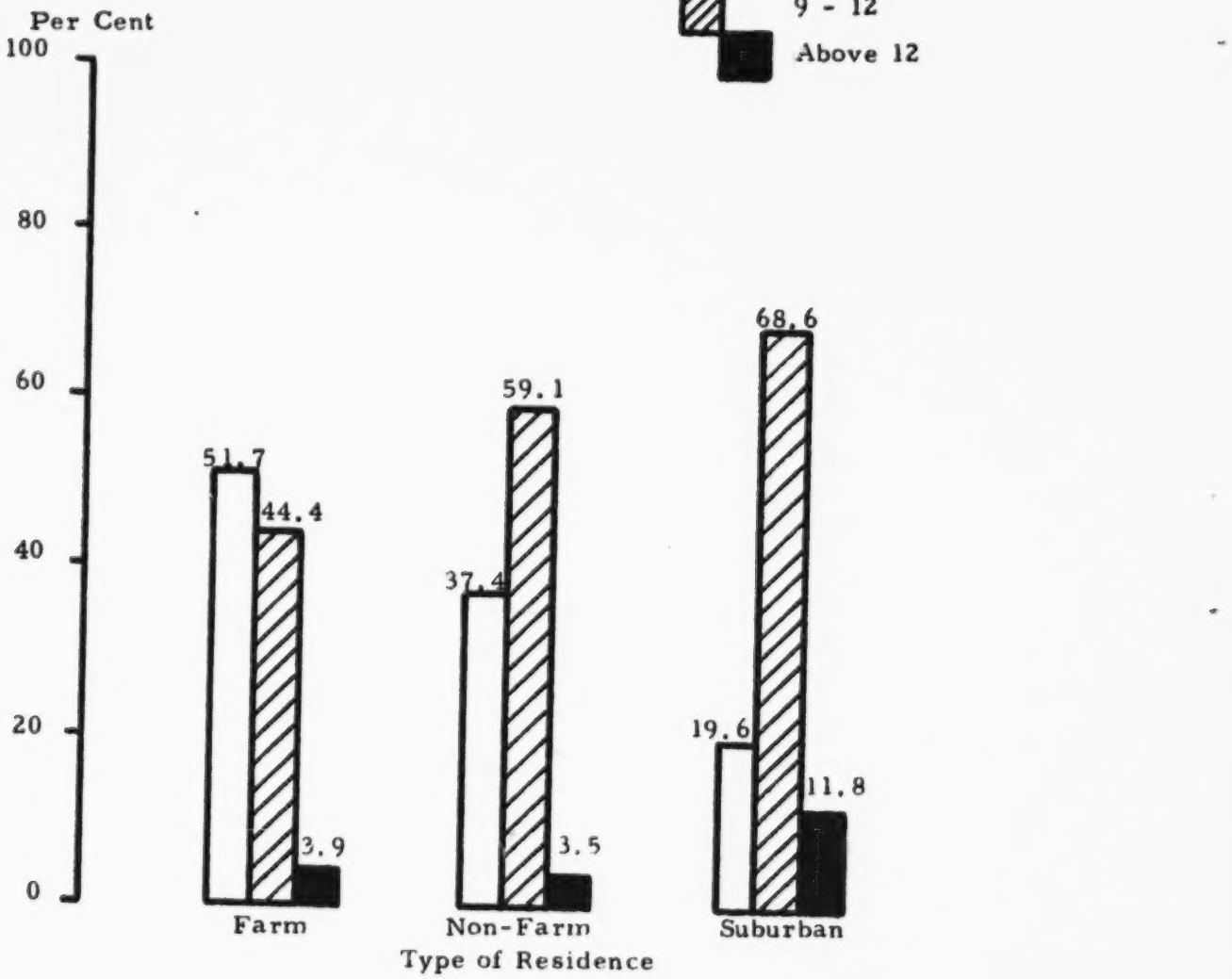


Figure 4

Educational Level of Mothers of High School Youth by Type of Residence

2. The School - High school youth spend much of their time in school. To indicate exposure to a variety of social experience the 1) number of schools attended during grade school, and 2) the number of schools attended during high school were selected. Figures 5 and 6 show strong relationships between type of residence and number of schools attended.[5] Students who attended only one school throughout their eight grades of grade school established friendships with classmates and friends with less variation. On the other hand, students who attended two or more schools, found themselves in a variety of different social contexts, and had to renew contacts and friendships which required new skills and resources.

Over two-thirds of the farm youth attended only one grade school during their eight years of schooling, while almost two-thirds of the suburban youth attended three or more schools during this time.[6] Only about one-eighth of the suburban students attended only one school.

A similar trend was evident when attendance of high schools was examined. Four-fifths of the farm youth attended only one high school, while almost three-quarters of suburban youth attended two or more.[7] Rural non-farm youth attended more grade and high schools, than farm youth, but not as many as suburban youth. Some of the strongest relationships were found between type of residence and number of

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[5] Figures 5 and 6. For more detail see Tables VIII and IX.

[6] Figure 5. $X^2 = 555.99$; $D/F = 4$; $P < .001$; $\overline{C} = .59195$.

[7] Figure 6. $X^2 = 365.15$; $D/F = 4$; $P < .001$; $\overline{C} = .49991$.

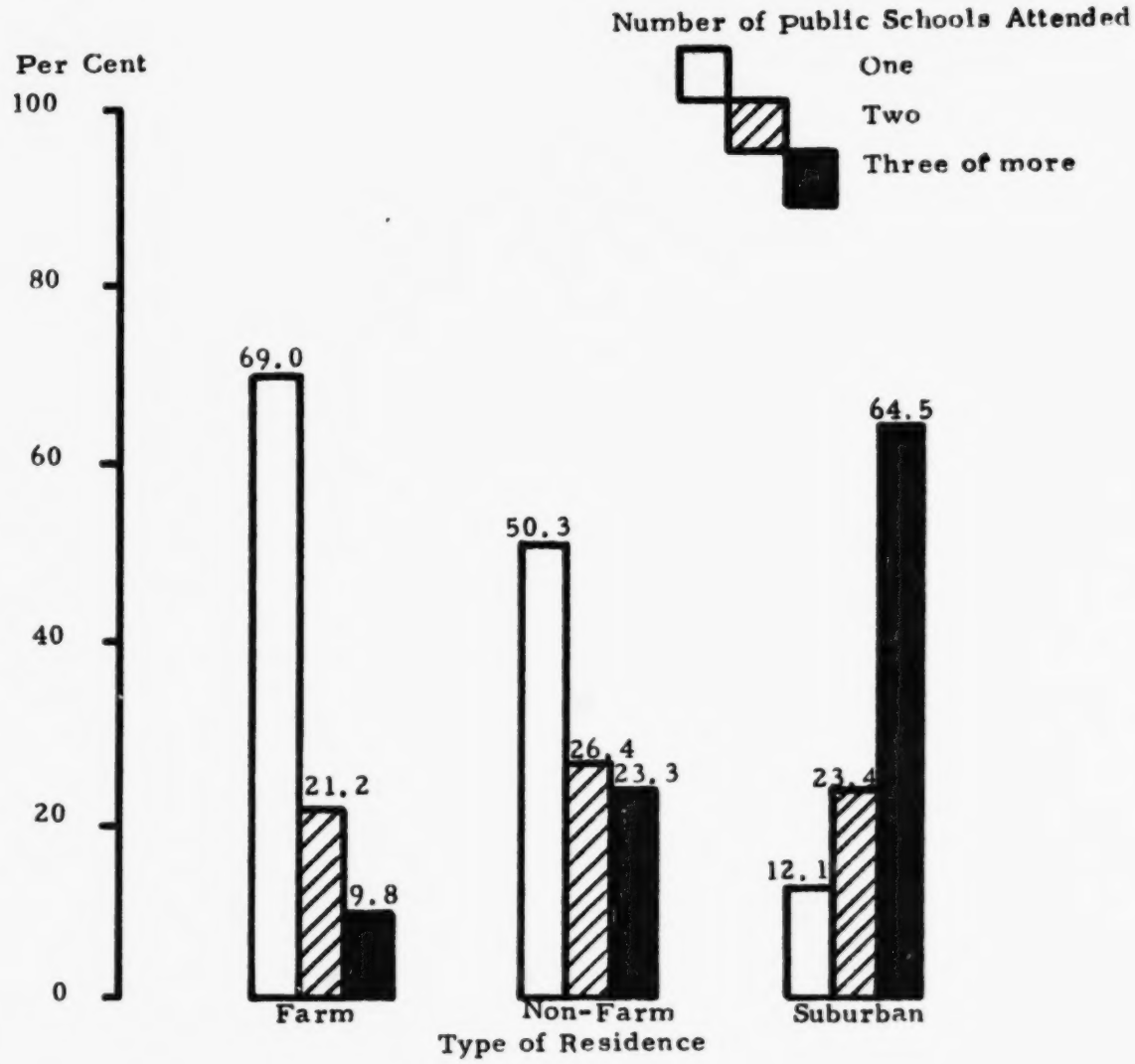


Figure 5

Number of Schools Attended (Grades 1 - 8) by High School Youth and Type of Residence

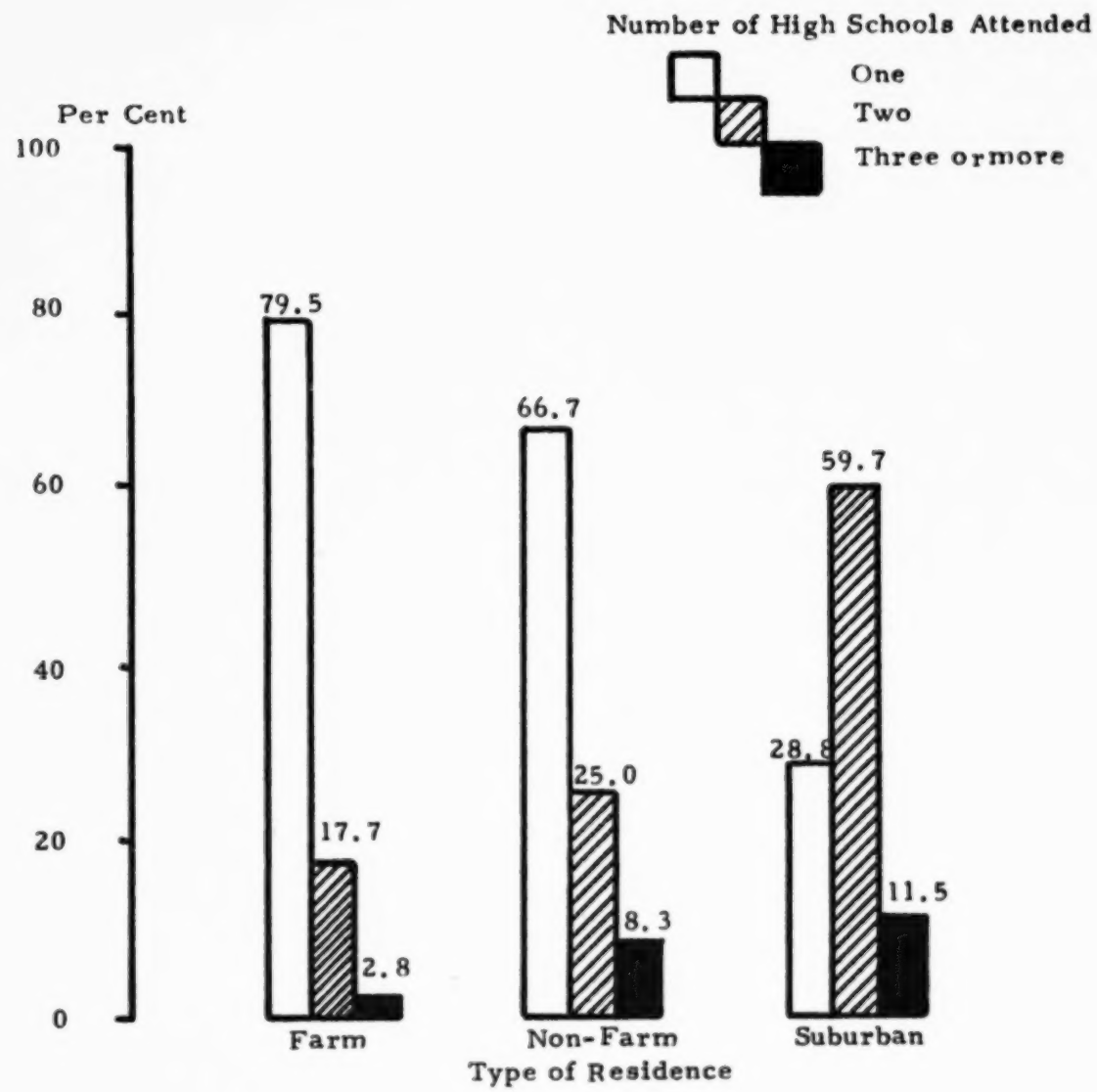


Figure 6

Number of Schools Attended (Grades 9 - 12) by High School Youth and Type of Residence

schools attended. Suburban youth attended more schools during their education than farm youth, while rural non-farm youth again ranked intermediately.

Those who attended more schools during their educational years were expected to meet more new friends, a greater variety of teachers, more students, and more new experiences so that diversity of social exposure would be greater. Other factors related to experience in school should be included in future studies, especially some factors related to relationships to peers. The data however do not permit sufficient exploration of other related factors.

3. At Work - For adults, work takes up a larger portion of time, so it would likely rank first or at least second to the home in importance. Nevertheless, part time and summer employment is an important experience of social exposure for youth, even though it is less important than the home and school, therefore it is included in this analysis.

Two indicators, (1) work away from home, and (2) summer employment point to exposure to social experience of youth. Again, the reasoning is that work at home adds less to the variety of new social experiences than work away from home which throws the youth into a new social environment, forces him to interact with new people and adds to his skills and knowledge. Figures 7 and 8 show a strong relationship between type of residence and these two work factors.[8]

---

[8]Figures 7 and 8. For further details see Tables X and XI in the appendix.

The work of suburban youth was about equally divided between regular, some, and no work away from home. Very few farm youth worked away from home regularly, and three-fifths did not work away from home. Rural non-farm youth worked away more than farm youth and about as much as suburban youth.[9]

A similar trend was found in summer paid employment, where almost half of the farm youth were not employed for pay, while only one-half of the suburban youth had no summer jobs.[10] The paid employment of rural non-farm youth and that of suburban youth were very similar. It is interesting to note that when all the youth of the sample are combined, about an equal number were engaged in full time, some and no summer paid employment. More youth worked during the summer than during the school year.

A summary of the seven factors pertaining to home, school and work exposure is given in Table II.[11] Controls run on some of the data, seem to relegate considerable importance to income and educational factors of families, which are indicators often used to determine social class. Many American, and some Canadian studies have shown the importance of social class, and this holds true for this Manitoba study also. The number of schools attended, and employment habits are

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[9] Figure 7. $X^2 = 205.52$; $D/F = 4$; $P < .001$; $\bar{C} = .39019$.

[10] Figure 8. $X^2 = 125.73$; $D/F = 4$; $P < .001$; $\bar{C} = .35102$.

[11] Table II summarizes Chi-squares and $\bar{C}$'s of type of residence and the seven factors related to social exposure.

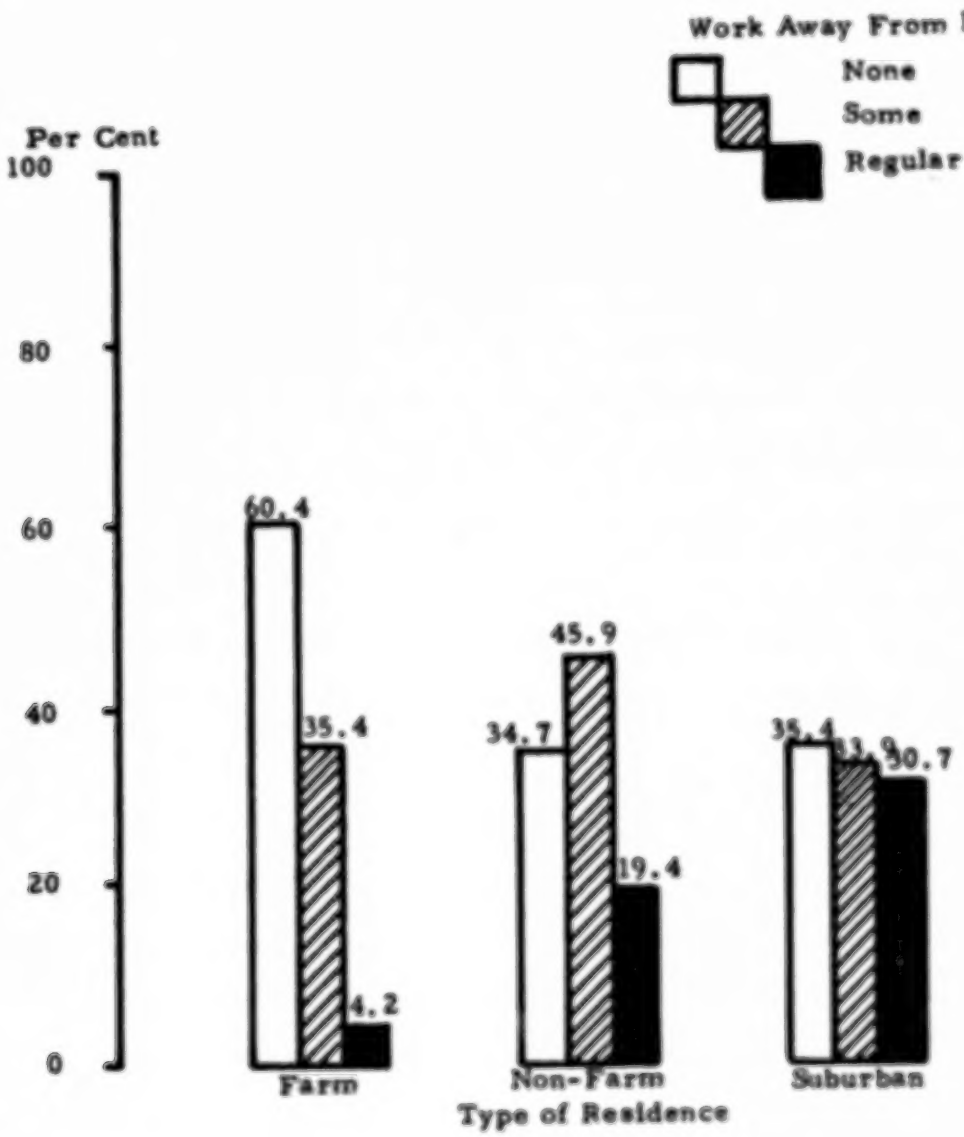


Figure 7

Work Away From Home by High School Youth and Type of Residence

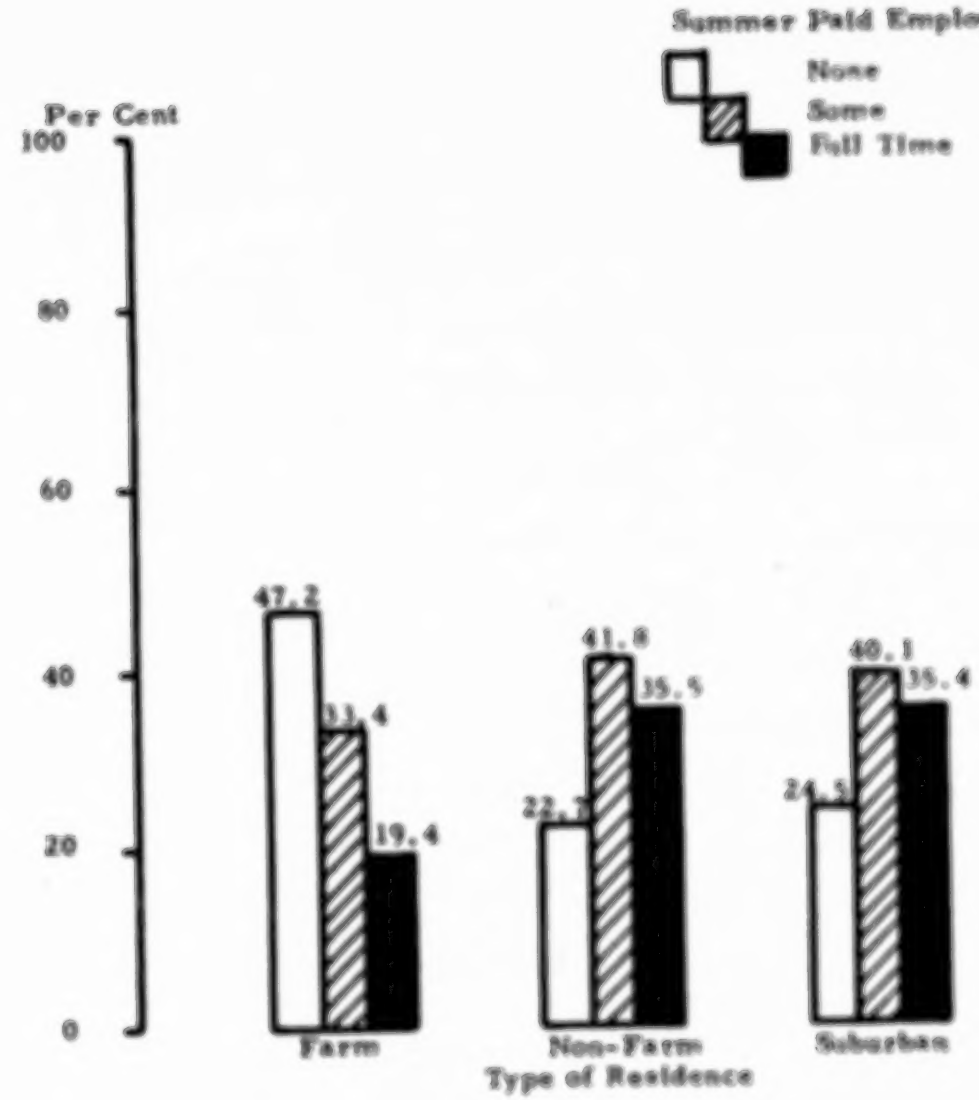


Figure 8

Summer Paid Employment of High School Youth and Type of Residence

also important in explaining the behavior of Manitoba rural and urban youth however they may not be independent factors, unrelated to social class.

All of the seven factors used to specify social exposure are associated with type of residence. Hypothesis 1 can be accepted for it was found that the more urban the residence of youth the greater the exposure to a diversity of social experience.

TABLE II

Relationship of Type of Residence to Diversity of Exposure to Social Experience.

| Type of Residence and | $X^2$ | D/F | P | C |
|---|---|---|---|---|
| Socio-economic Status | 394.76 | 4 | $<.001$ | .51750 |
| Father's Education | 316.07 | 4 | $<.001$ | .47163 |
| Mother's Education | 163.37 | 4 | $<.001$ | .35224 |
| Number of Grade Schools Attended | 555.99 | 4 | $<.001$ | .59195 |
| Number of High Schools Attended | 365.15 | 4 | $<.001$ | .49991 |
| Work Away from Home | 205.52 | 4 | $<.001$ | .39019 |
| Summer Paid Employment | 125.73 | 4 | $<.001$ | .31910 |

B. Motivational Factors

Less emphasis should be laid on the term motivation and more on the five factors included. At first the category "aspirations" was considered, but a broader category is needed, with aspirations as one of the factors included.

Five factors were selected for discussion under motivation and these will be discussed under the three categories, (1) ability, (2) self concept, and (3) aspirations.

1. Ability - The two factors 1) intelligence quotient, and 2) school marks were selected to indicate ability of youth. These two are widely used to rank students in education. Figures 9 and 10 show a strong relationship between the type of residence and these two factors.[12]

Almost three times as many farm youth as suburban youth scored below 90, while about twice as many suburban youth as farm youth scored above 110 in I.Q. tests.[13] About two-thirds of the farm students had an average score between 90 - 110, about one-quarter scored above average, and about one-sixth scored below average, with a slightly better than average total. About one-third of the suburban students rated average, over one-half were above average, and few scored below average, with a total score considerably above average. Rural non-farm students again scored higher than farm, but lower than suburban youth.

High school marks of the students were averaged and compared by type of residence. Whereas two-fifths of the farm students had

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[12] Figures 9 and 10. See Tables XII and XIII for further details.

[13] Figure 9. $X^2 = 103.03$; $D/F = 4$; $P < .001$; $\overline{C} = .31234$.

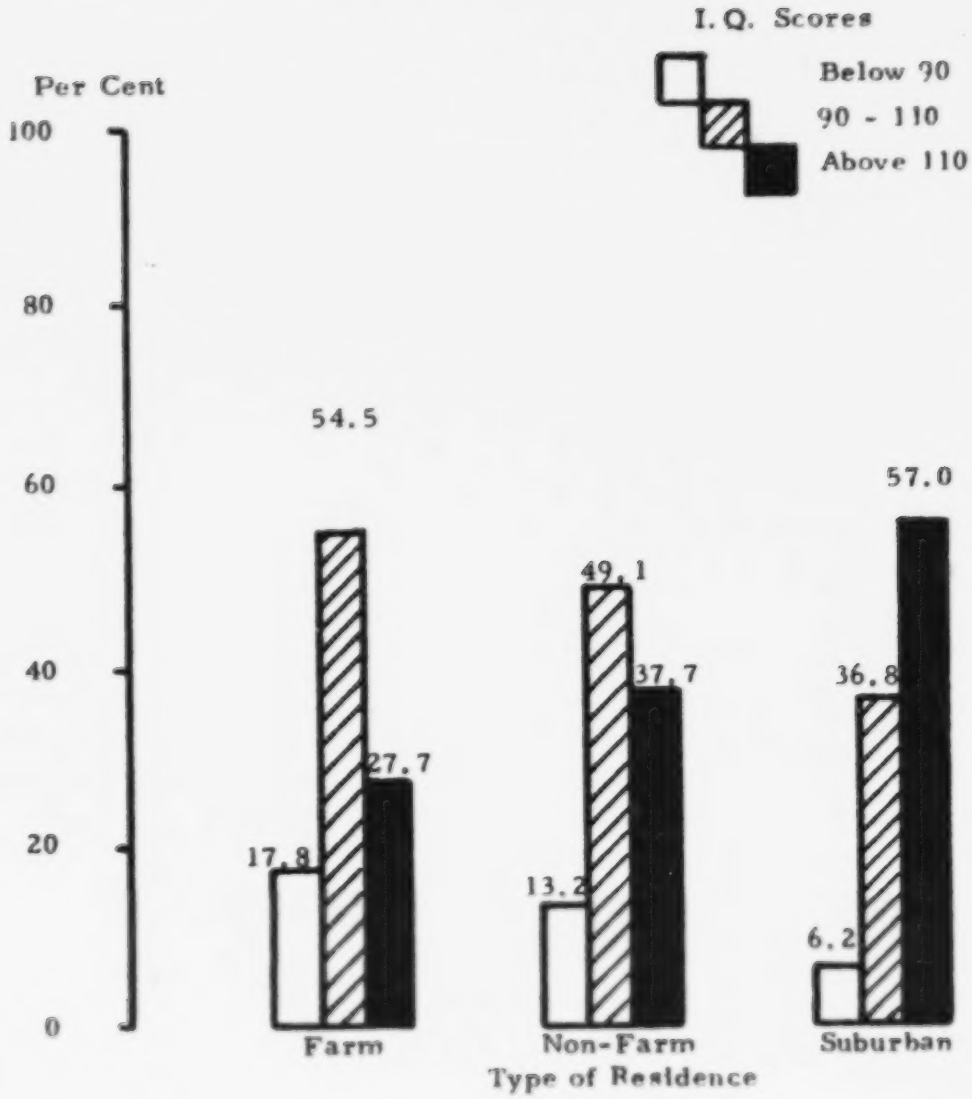


Figure 9

I.Q. of High School Youth by Type of Residence

averages below sixty, and one-quarter had averages above seventy, the suburban marks of youth were reversed with two-thirds above seventy, and one-quarter below sixty.[14] Rural non-farm students did not do as well as either the farm or the suburban students, with nearly half below sixty.

The data show that youth from suburban type residences tended to score higher in I.Q. tests and high school marks than youth from farm type residences with a variation in the rural non-farm group.

2. Self Concept - Students were asked to rank their own leadership ability which we will refer to as self concept. Additional factors should be included to give a more comprehensive concept of self, but the data did not allow for this. Figure 11shows a significant relationship between type of residence and the student's own concept of his leadership abilities.[15]

A large majority of all students rated themselves average in leadership ability. Twice as many farm youth rated themselves less than average as did above average, while suburban youth were reversed with twice as many rating themselves above average rather than below average. Although additional factors would help to verify the trend more, there was a significant association between type of residence and leadership rating.

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[14] Figure 10. $X^2 = 64.67$; $D/F = 4$; $P < .001$; $\bar{C} = .25240$.

[15] Figure 11. See also Table XIV. $X^2 = 53.40$; $D/F = 4$; $P < .004$; $\bar{C} = .20776$.

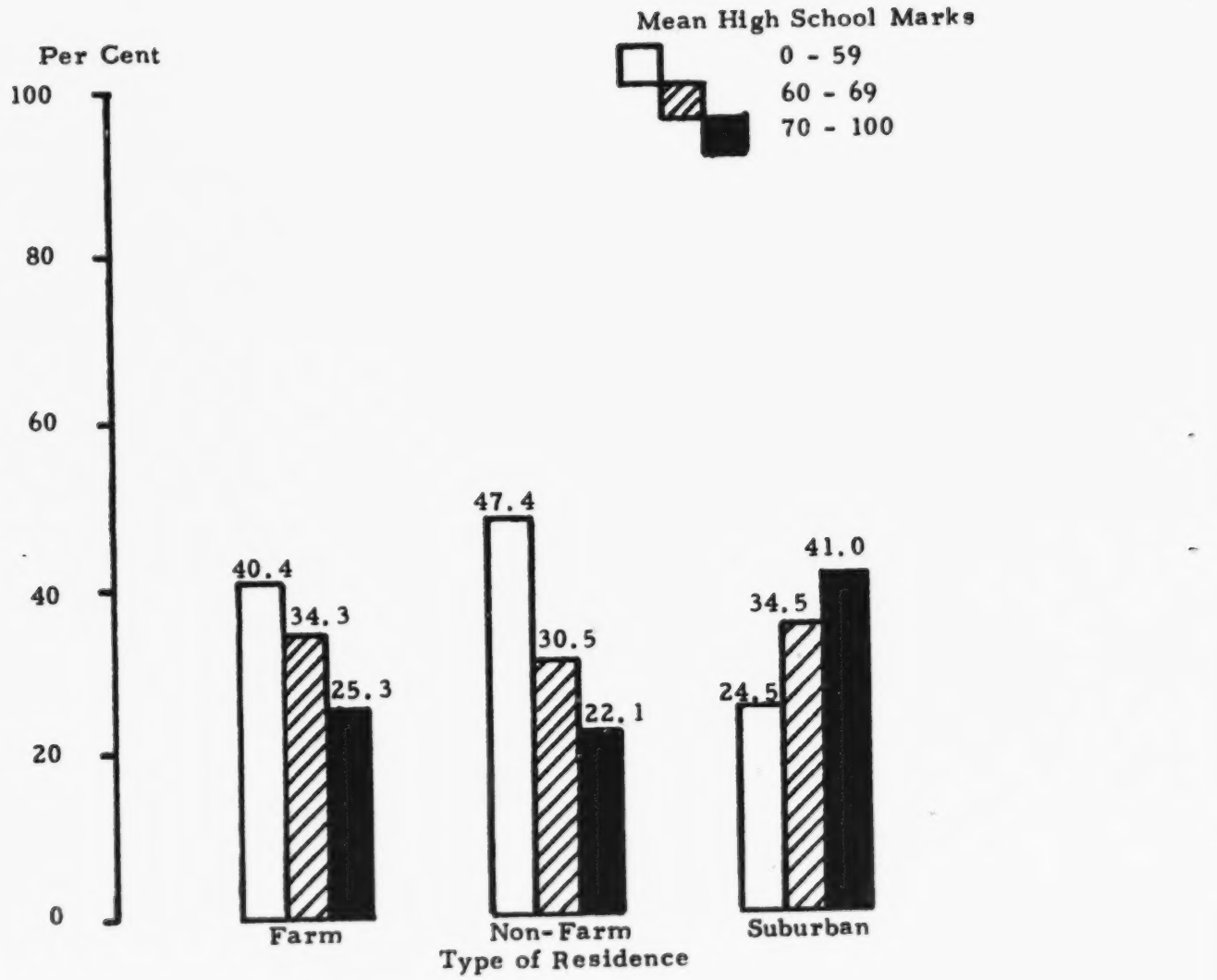


Figure 10

Mean High School Marks of High School Youth
by Type of Residence

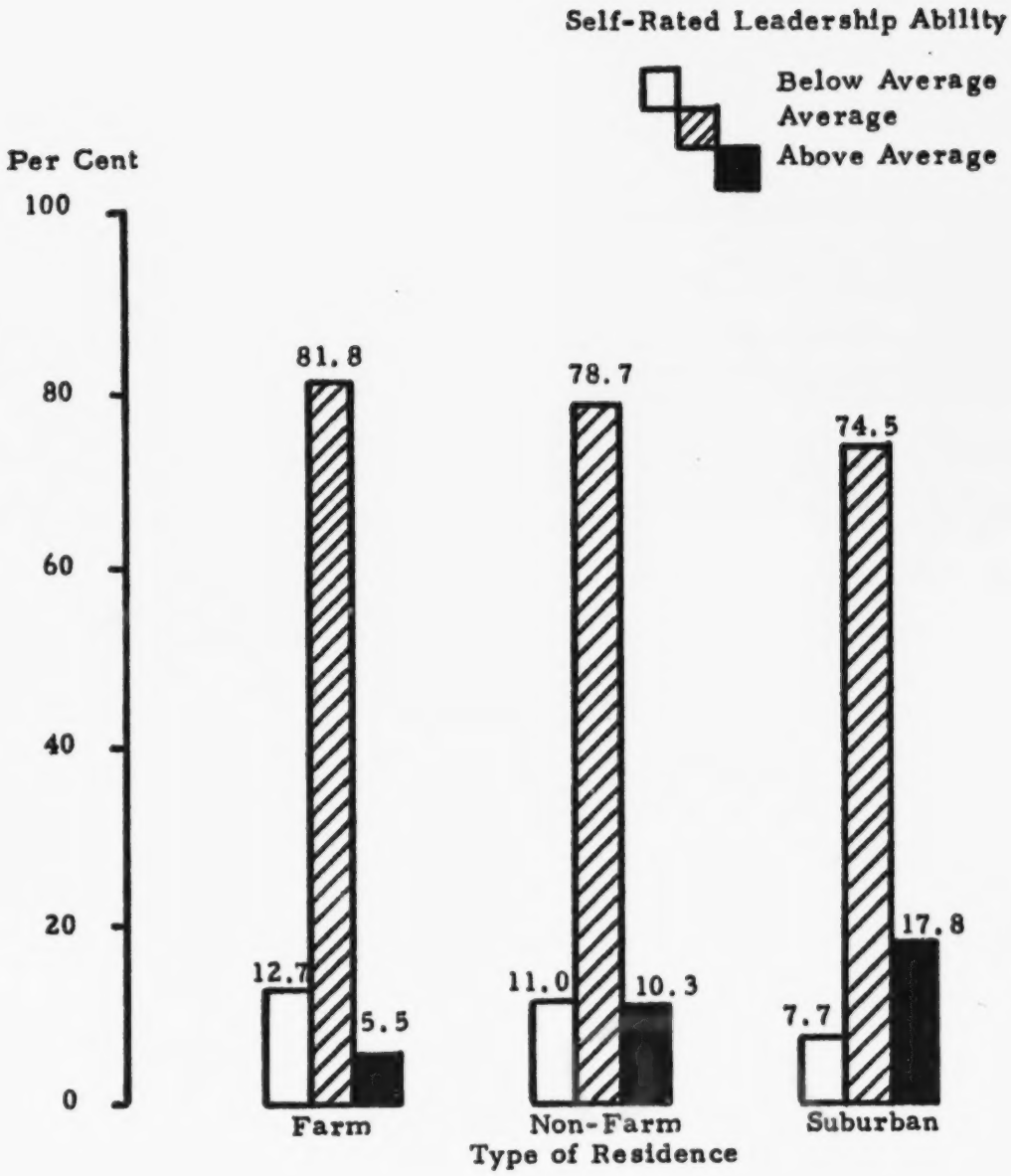


Figure 11

Self-Rated Leadership Ability of High School Youth
by Type of Residence

3. Aspirations - The educational and occupational aspirations of Manitoba students have been thoroughly discussed in the preceding three reports in this series. Aspirations are an important part of factors related to student motivation. Figures 12 and 13 indicate the significant relationships of these aspirations and type of residence.[16]

Two-thirds of the suburban youth held high educational aspirations hoping to go to university.[17] Very few did not plan to continue their education beyond high school. About one-third, or half as many farm youth aspired to a university education, but more aspired to enter vocational training such as teachers' college, or nurses' training. This would indicate that farm youth are interested in education more directly work-related.

The same trend was evident in occupational aspirations, although the relationship was not as strong.[18] About two-thirds of all youth scored in the medium range on occupational aspirations. Almost twice as many farm students as suburban students scored low, and twice as many suburban students as farm students scored high in occupational aspirations.

After consideration of the five factors related to motivation of students the tests indicate strong relationships between type of residence

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[16] Figures 12 and 13. See Tables XV and XVI for more details.

[17] Figure 12. $X^2 = 79.80$; $D/F = 4$; $P < .001$; $\bar{C} = .27613$.

[18] Figure 13. $X^2 = 38.62$; $D/F = 4$; $P < .001$; $\bar{C} = .17649$.

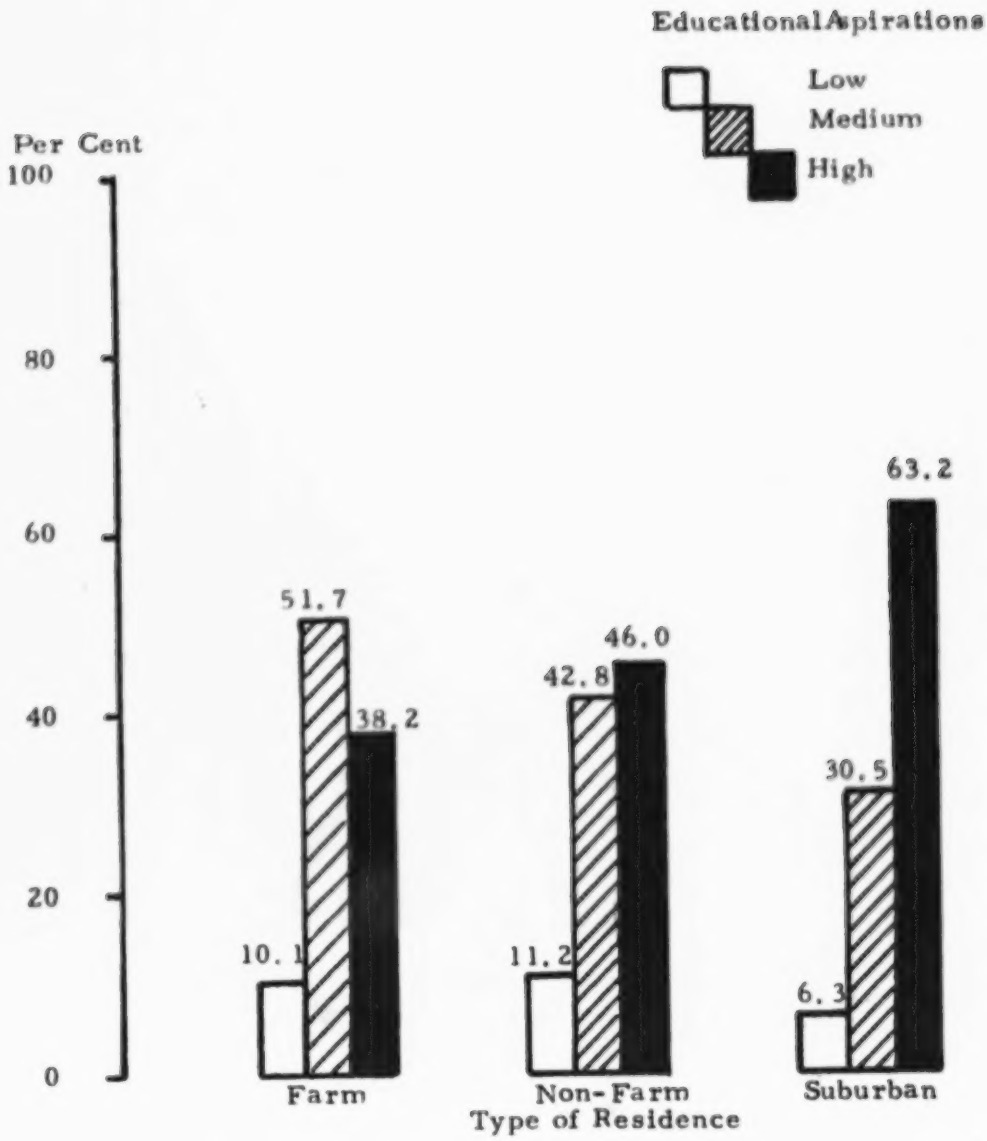


Figure 12

Educational Aspirations of High School Youth
by Type of Residence

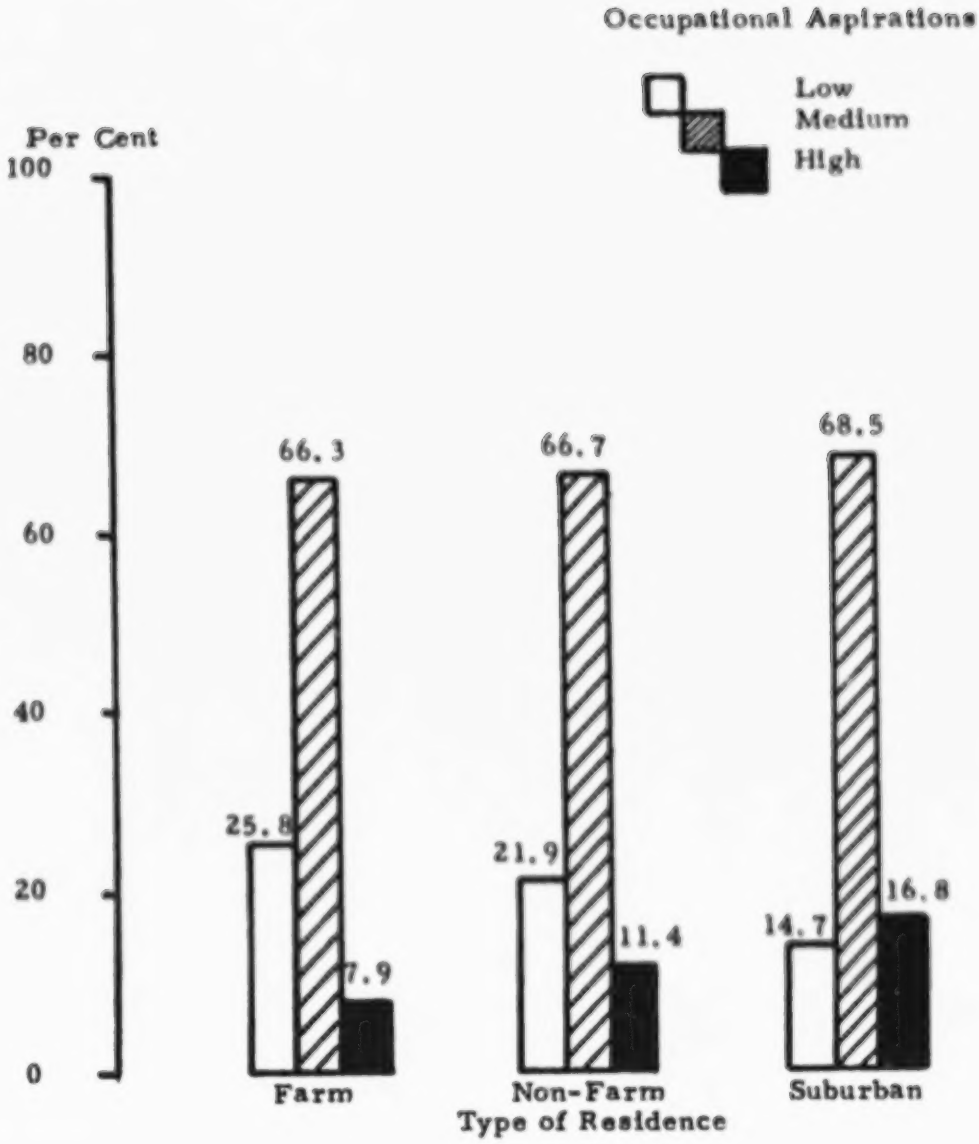


Figure 13

Occupational Aspiration Scores of High School Youth
by Type of Residence

and these five factors.[19] The hypothesis that the more urban the residence of youth the greater the motivation of students can be accepted. The factors of I.Q. and school marks, considered as student ability seem to be especially significant.

C. Exposure and Motivational Relationships

The data support the two hypotheses that there is a significant relationship between type of residence and social exposure, and type of residence and student motivation. It would seem logical that there would also be a relationship between exposure and motivational factors of high school students.

It is not within the scope of this study to test the third hypothesis, since the research and data were not designed for such comparisons. Nevertheless, when the strongest three factors of social exposure related to the home were taken (S.E.S., Fathers' education and mothers' education) and compared with two of the strongest factors related to motivations (I.Q. and Educational Aspirations) we find some significant associations. There are indications that research on these relationships could be quite fruitful.[20]

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[19] Table III summarizes chi-squares and corrected correlation coefficients of type of residence and the five factors related to motivation.

[20] See Table IV.

TABLE III

Relationship of Type of Residence to Motivational Factors

| Type of Residence and | $X^2$ | D/F | P | $\bar{C}$ |
|---|---|---|---|---|
| Intelligence Quotient | 103.03 | 4 | < .001 | .31234 |
| Marks | 64.67 | 4 | < .001 | .23240 |
| Self Leadership Rating | 53.40 | 4 | < .001 | .20776 |
| Educational Aspirations | 79.80 | 4 | < .001 | .27613 |
| Occupational Aspirations | 38.62 | 4 | < .001 | .17649 |

TABLE IV

Association of I.Q. and Educational Aspirations with S.E.S., Father's and Mother's Education

| I.Q. and | $X^2$ | D/F | P | $\bar{C}$ |
|---|---|---|---|---|
| Socio-economic Status | 76.08 | 4 | < .001 | .27089 |
| Father's Education | 79.93 | 4 | < .001 | .27901 |
| Mother's Education | 115.57 | 4 | < .001 | .33065 |
| Educational Aspirations and | | | | |
| Socio-economic Status | 65.04 | 4 | < .001 | .25438 |
| Father's Education | 62.00 | 4 | < .001 | .24157 |
| Mother's Education | 79.85 | 4 | < .001 | .27703 |

Although figures for I.Q. associations are not included the tables indicate that of those students with an I.Q. above 110, twice as many were of high economic status as of low economic status.[21] Of the students with an I.Q. below 90, three times as many were of low economic status as of high economic status.[22] The findings on I.Q. and father's education were very similar where of those students with a high I.Q. twice as many had fathers with above high school training as those with fathers of grade school training only.[23] In fact very few of the students with an I.Q. below 90 had fathers with an education above high school. A similar trend was evident in the comparison between I.Q. and mother's educational level.[24] The data show that the higher the socio-economic status and education of the parents, the higher the I.Q. of the student.

Similar tests were run on educational aspirations of youth and socio-economic status and parents' educational level.[25] It was found that the higher the educational aspirations the higher the socio-economic

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[21] Tables XVII, XVIII and XIX in the appendix.

[22] Table XVII in the appendix.
$X^2 = 76.08$; D/F = 4; $P < .001$; $\bar{C} = .27089$.

[23] Table XVIII in the appendix.
$X^2 = 79.93$; D/F = 4; $P < .001$; $\bar{C} = .27901$.

[24] Table XIX in the appendix.
$X^2 = 115.57$; D/F = 4; $P < .001$; $\bar{C} = .33065$.

[25] Tables XX, XXI, XXII in the appendix.

status.[26] The tests also indicated that the higher the educational aspirations of youth the higher the level of their father's education.[27] Finally, the higher the aspirational level of the student, the higher the mother's education.[28]

As stated earlier, no attempt is made in this report to test and prove the hypothesis that there is a relationship between social exposure and motivations of students. The preliminary tests on some related factors indicate that such a study would be fruitful if research was designed for this purpose, and better data collected. Since the findings of this study indicate significant relationships between type of residence and social exposure, and type of residence and motivations of students, it would be rewarding if it could be established that there is a positive relationship between the social exposure of students and their motivations.

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[26]Table XX. $X^2 = 45.04$; D/F = 4; $P < .001$; $\bar{C} = .25458$.

[27]Table XXI. $X^2 = 48.00$; D/F = 4; $P < .001$; $\bar{C} = .26151$.

[28]Table XXII. $X^2 = 70.85$; D/F = 4; $P < .001$; $\bar{C} = .27701$.

## CHAPTER III

## FINDINGS AND CONCLUSIONS

A number of closing comments will be made, although it is recognized that in a limited study, trends and associations must be treated with caution.

1. Rural-Urban Usefulness. There are many rural-ruban differences in Manitoba so that these categories are still useful. Suburbanites tended to rank significantly higher than farm youth on socio-economic status, parent education, number of schools attended, work away from home, I.Q., average marks, leadership rating, and aspirations. Rural non-farm youth tended to rank intermediately. It would seem that the type of residence is a container or crucible in which a certain quality of factors rest. Given a farm environment, we can expect persons with different motivations, aspirations and abilities than if they lived in the city.

2. Canada-U.S.A. Comparisons. A number of findings in the United States also hold true for Canada. Lower educational and occupational aspirational levels are associated with rurality; the urban self-concept, intellectual ability and economic status is

higher; and more urban exposure to a variety of schools and work is apparent. This study would support many U.S.A. findings, and give greater confidence that Canadian rural-urban society tends to follow American patterns of life. This knowledge is especially useful since Canadian studies are limited.

3. Diversity of Exposure. This research strongly indicates that the type of residence students come from is significantly related to exposure to a variety of experiences, people, and places. The city and the suburb give more opportunity to learn, see and do new things. Mobility and choices are greater in the city than on the farm. The student on the farm attends fewer schools, works at home more with less change of environment and has fewer opportunities to listen to music, see T.V., read books and contact new people. Parents of suburban youth are more highly educated, thus promote more interest in books, education and choice in a variety of occupations. A higher socio-economic status permits the purchase of goods and experiences which enhance exposure in the suburbs.

4. Motivational Factors. Farm students were less confident of their leadership ability than rural non-farm and suburban youth, and farm I.Q.'s and high school marks were also lower than that of suburban students. Students who receive good marks and who are able to compete well intellectually tend to also become more aggressive and confident among their peers, so that leadership abilities can develop.

The data support the conclusions that the suburbs are more conducive to developing motivation toward study and leadership. Suburban educational and occupational aspirations were also higher. Although it cannot be stated conclusively, it would seem that all of these factors tend to influence each other so that the total drives and desire to attain certain goals are greatly enhanced. Whether it can be said that suburban motivations are higher is not certain, but related factors would tend to indicate this.

5. Exposure-Motivation Associations. Claims that the greater the diversity of social exposure the higher the motivation cannot be made in this study. The associations between factors such as I. Q. and aspirations with parent education and socio-economic status indicate however that future study in this area might be fruitful. If further research would find that greater exposure enhances higher motivations the rural-urban dichotomy would take on new meaning. In that case youth should be encouraged to go to the city if higher aspirations, motivations and confidence would be desired, or more educational and other opportunities might be brought to rural areas. Further study in the motivational-exposure area would be helpful.

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# APPENDIX

TABLE V

Socio-Economic Status of High School Youth by Type of Residence

| Socio-Economic Status | Type of Residence: Farm | | Non-Farm | | Suburban | | TOTAL | |
|---|---|---|---|---|---|---|---|---|
| | No. | % | No. | % | No. | % | No. | % |
| Low | 350 | 50.7 | 154 | 28.4 | 31 | 5.3 | 535 | 29.4 |
| Medium | 257 | 37.2 | 250 | 46.0 | 258 | 44.1 | 765 | 42.1 |
| High | 84 | 12.1 | 139 | 25.6 | 296 | 50.6 | 519 | 28.5 |
| TOTAL | 691 | 100.0 | 543 | 100.0 | 585 | 100.0 | 1819 | 100.0 |

$X^2 = 394.76$, $D/F = 4$, $P < .001$, $\bar{C} = .51750$

TABLE VI

Educational Level of Fathers of High School Youth by Type of Residence

| Fathers' Education | Type of Residence: Farm | | Non-Farm | | Suburban | | TOTAL | |
|---|---|---|---|---|---|---|---|---|
| | No. | % | No. | % | No. | % | No. | % |
| Grades 1 - 8 | 478 | 69.5 | 270 | 50.5 | 133 | 22.8 | 881 | 49.0 |
| 9 - 12 | 197 | 28.6 | 223 | 41.9 | 327 | 56.5 | 747 | 41.5 |
| Beyond 12 | 13 | 1.9 | 40 | 7.6 | 119 | 20.7 | 172 | 9.5 |
| TOTAL | 688 | 100.0 | 533 | 100.0 | 579 | 100.0 | 1800 | 100.0 |

$X^2 = 316.07$, $D/F = 4$, $P < .001$, $\bar{C} = .47363$

TABLE VII

Educational Level of Mothers of High School Youth by Type of Residence

| Mothers' Education | Type of Residence | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | Farm | | Non-Farm | | Suburban | | TOTAL | |
| Grades | No. | % | No. | % | No. | % | No. | % |
| 1 - 8 | 357 | 51.7 | 203 | 37.4 | 114 | 19.6 | 674 | 37.2 |
| 9 - 12 | 307 | 44.4 | 320 | 59.1 | 399 | 68.6 | 1026 | 56.6 |
| Beyond 12 | 26 | 3.9 | 19 | 3.5 | 69 | 11.8 | 114 | 6.2 |
| TOTAL | 690 | 100.0 | 542 | 100.0 | 582 | 100.0 | 1814 | 100.0 |

$X^2 = 163.37$, $D/F = 4$, $P < .001$, $\bar{C} = .35224$

TABLE VIII

Number of Schools Attended (Grades 1 - 8) by High School Youth and Type of Residence

| Number of Schools | Type of Residence | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | Farm | | Non-Farm | | Suburban | | TOTAL | |
| | No. | % | No. | % | No. | % | No. | % |
| 1 | 479 | 69.0 | 274 | 50.3 | 71 | 12.1 | 824 | 45.1 |
| 2 | 147 | 21.2 | 144 | 26.4 | 138 | 23.4 | 429 | 23.5 |
| 3 + | 68 | 9.8 | 127 | 23.3 | 379 | 64.5 | 574 | 31.4 |
| TOTAL | 694 | 100.0 | 545 | 100.0 | 588 | 100.0 | 1827 | 100.0 |

$X^2 = 555.99$, $D/F = 4$, $P < .001$, $\bar{C} = .59195$

TABLE IX

Number of Schools Attended (Grades 9 - 12) by High School Youth and Type of Residence

| Number of Schools | Type of Residence | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | Farm | | Non-Farm | | Suburban | | TOTAL | |
| | No. | % | No. | % | No. | % | No. | % |
| 1 | 552 | 79.5 | 364 | 66.7 | 170 | 28.8 | 1086 | 59.4 |
| 2 | 123 | 17.7 | 136 | 25.0 | 352 | 59.7 | 611 | 33.4 |
| 3 + | 19 | 2.8 | 45 | 8.3 | 68 | 11.5 | 132 | 7.2 |
| TOTAL | 694 | 100.0 | 545 | 100.0 | 590 | 199.0 | 1829 | 100.0 |

$X^2$ = 365.15. D/F = 4. $P < .001$. $\bar{C}$ = .49991

TABLE X

Work Away From Home by High School Youth and Type of Residence

| Work Away From Home | Type of Residence | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | Farm | | Non-Farm | | Suburban | | TOTAL | |
| | No. | % | No. | % | No. | % | No. | %. |
| None | 418 | 60.4 | 188 | 34.7 | 208 | 35.4 | 814 | 44.7 |
| Some | 245 | 35.4 | 249 | 45.9 | 199 | 33.9 | 693 | 38.1 |
| Regular | 29 | 4.2 | 105 | 19.4 | 180 | 30.7 | 314 | 17.2 |
| TOTAL | 692 | 100.0 | 542 | 100.0 | 587 | 100.0 | 1821 | 100.0 |

$X^2$ = 205.52. D/F = 4. $P < .001$. $\bar{C}$ = .39019

TABLE XI

Summer Paid Employment of High School Youth by Type of Residence

| Summer Employment | Type of Residence | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | Farm | | Non-Farm | | Suburban | | TOTAL | |
| | No. | % | No. | % | No. | % | No. | % |
| None | 326 | 47.2 | 123 | 22.7 | 144 | 24.5 | 593 | 32.5 |
| Some | 231 | 33.4 | 226 | 41.8 | 237 | 40.1 | 694 | 38.1 |
| Full Time | 134 | 19.4 | 192 | 35.5 | 209 | 35.4 | 535 | 29.4 |
| TOTAL | 691 | 100.0 | 541 | 100.0 | 590 | 100.0 | 1822 | 100.0 |

$X^2$ = 125.73. D/F = 4. $P < .001$. $\bar{C}$ = .35102

TABLE XII

I.Q. of High School Youth by Type of Residence

| I.Q. | Type of Residence | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | Farm | | Non-Farm | | Suburban | | TOTAL | |
| | No. | % | No. | % | No. | % | No. | % |
| -90 | 106 | 17.8 | 55 | 13.2 | 29 | 6.2 | 190 | 12.8 |
| 90 - 110 | 325 | 54.5 | 205 | 49.1 | 173 | 36.8 | 703 | 47.4 |
| 111 + | 165 | 27.7 | 157 | 37.7 | 268 | 57.0 | 590 | 39.8 |
| TOTAL | 596 | 100.0 | 417 | 100.0 | 470 | 100.0 | 1483 | 100.0 |

$X^2$ = 103.03. D/F = 4. $P < .001$. $\bar{C}$ = .31234

TABLE XIII

Mean High School Marks of High School Youth by Type of Residence

| Marks | Type of Residence | | | | | | TOTAL | |
|---|---|---|---|---|---|---|---|---|
| | Farm | | Non-Farm | | Suburban | | | |
| | No. | % | No. | % | No. | % | No. | % |
| 0 - 59 | 240 | 40.4 | 197 | 47.4 | 110 | 24.5 | 547 | 38.5 |
| 60 - 69 | 203 | 34.3 | 127 | 30.5 | 155 | 34.5 | 485 | 34.2 |
| 70 - 100 | 152 | 25.3 | 92 | 22.1 | 184 | 41.0 | 428 | 27.3 |
| TOTAL | 595 | 100.0 | 416 | 100.0 | 449 | 100.0 | 1460 | 100.0 |

$X^2 = 64.67$, $D/F = 4$, $P < .001$, $\bar{C} = .25240$

TABLE XIV

Self-Rated Leadership Ability of High School Youth by Type of Residence

| Leadership Rating | Type of Residence | | | | | | TOTAL | |
|---|---|---|---|---|---|---|---|---|
| | Farm | | Non-Farm | | Suburban | | | |
| | No. | % | No. | % | No. | % | No. | % |
| - Average | 87 | 12.7 | 59 | 11.0 | 45 | 7.7 | 191 | 10.6 |
| Average | 560 | 81.8 | 422 | 78.7 | 435 | 74.5 | 1417 | 78.5 |
| + Average | 38 | 5.5 | 55 | 10.3 | 104 | 17.8 | 197 | 10.9 |
| TOTAL | 685 | 100.0 | 536 | 100.0 | 584 | 100.0 | 1805 | 100.0 |

$X^2 = 53.40$, $D/F = 4$, $P < .001$, $\bar{C} = .20776$

TABLE XV

Educational Aspirations of High School Youth by Type of Residence

| Educational Aspirations | Type of Residence | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | Farm | | Non-Farm | | Suburban | | TOTAL | |
| | No. | % | No. | % | No. | % | No. | % |
| Low | 69 | 10.1 | 60 | 11.2 | 36 | 6.3 | 165 | 9.1 |
| Medium | 354 | 51.7 | 229 | 42.8 | 175 | 30.5 | 758 | 42.3 |
| High | 262 | 38.2 | 246 | 46.0 | 363 | 63.2 | 871 | 48.6 |
| TOTAL | 685 | 100.0 | 535 | 100.0 | 574 | 100.0 | 1794 | 100.0 |

$\chi^2 = 79.68$, D/F = 4, $P < .001$, $\bar{C} = .27613$

TABLE XVI

Occupational Aspiration Scores of High School Youth by Type of Residence

| Occupational Aspirations | Type of Residence | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | Farm | | Non-Farm | | Suburban | | TOTAL | |
| Scores | No. | % | No. | % | No. | % | No. | % |
| 0 - 35 | 177 | 25.8 | 115 | 21.9 | 81 | 14.7 | 373 | 21.4 |
| 36 - 55 | 455 | 66.3 | 351 | 66.7 | 377 | 68.5 | 1183 | 67.4 |
| 56 - 75 | 54 | 7.9 | 60 | 11.4 | 92 | 16.8 | 206 | 11.2 |
| TOTAL | 686 | 100.0 | 526 | 100.0 | 550 | 100.0 | 1762 | 100.0 |

$\chi^2 = 18.62$, D/F = 4, $P < .001$, $\bar{C} = .17649$

TABLE XVII

Socio-Economic Status and I.Q. of High School Youth

| I.Q. | Socio-Economic Status: Low | | Medium | | High | | TOTAL | |
|---|---|---|---|---|---|---|---|---|
| | No. | % | No. | % | No. | % | No. | % |
| - 90 | 85 | 19.3 | 75 | 12.0 | 29 | 7.1 | 189 | 12.7 |
| 90 - 110 | 247 | 56.0 | 286 | 45.3 | 170 | 41.6 | 703 | 47.5 |
| 111 + | 109 | 24.7 | 270 | 42.7 | 210 | 51.3 | 589 | 39.8 |
| TOTAL | 441 | 100.0 | 631 | 100.0 | 409 | 100.0 | 1481 | 100.0 |

$X^2 = 76.08$, D/F = 4, $P < .001$, $\bar{C} = .27089$

TABLE XVIII

Father's Educational Level and I.Q. of High School Youth

| I.Q. | Father's Educational Level: Public School | | High School | | Above High School | | TOTAL | |
|---|---|---|---|---|---|---|---|---|
| | No. | % | No. | % | No. | % | No. | % |
| - 90 | 128 | 17.4 | 51 | 8.5 | 8 | 6.2 | 187 | 12.8 |
| 90 - 110 | 386 | 52.5 | 266 | 44.5 | 40 | 31.0 | 692 | 47.4 |
| 111 + | 221 | 30.1 | 281 | 47.0 | 81 | 62.8 | 583 | 39.8 |
| TOTAL | 735 | 100.0 | 598 | 100.0 | 129 | 100.0 | 1462 | 100.0 |

$X^2 = 79.93$, D/F = 4, $P < .001$, $\bar{C} = .27901$

TABLE XIX

Mothers' Educational Level and I.Q. of High School Youth

| I.Q. | Mothers' Educational Level: Public School | | High School | | Beyond High School | | TOTAL | |
|---|---|---|---|---|---|---|---|---|
| | No. | % | No. | % | No. | % | No. | % |
| - 90 | 111 | 19.7 | 74 | 9.0 | 3 | 3.5 | 188 | 12.7 |
| 90 - 110 | 316 | 56.0 | 358 | 43.5 | 25 | 29.4 | 699 | 47.5 |
| 111+ | 137 | 24.3 | 391 | 47.5 | 57 | 67.1 | 585 | 39.8 |
| TOTAL | 564 | 100.0 | 823 | 100.0 | 85 | 100.0 | 1472 | 100.0 |

$X^2 = 115.57$, D/F = 4, $P < .001$, $\bar{C} = .33065$

TABLE XX

Socio-Economic Status and Educational Aspirations of High School Youth

| Educational Aspirations | Socio-Economic Status: Low | | Medium | | High | | TOTAL | |
|---|---|---|---|---|---|---|---|---|
| | No. | % | No. | % | No. | % | No. | % |
| Low | 319 | 62.2 | 370 | 48.6 | 181 | 34.4 | 870 | 48.3 |
| Medium | 163 | 31.8 | 321 | 42.2 | 279 | 53.0 | 763 | 42.4 |
| High | 31 | 6.0 | 70 | 9.2 | 66 | 12.6 | 167 | 9.3 |
| TOTAL | 513 | 100.0 | 761 | 100.0 | 526 | 100.0 | 1800 | 100.0 |

$X^2 = 65.04$, D/F = 4, $P < .001$, $\bar{C} = .25438$

TABLE XXI

Father's Educational Level and Educational Aspirations of High School Youth

| Educational Aspirations | Father's Educational Level | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | Public School | | High School | | Above High School | | TOTAL | |
| | No. | % | No. | % | No. | % | No. | % |
| Low | 99 | 11.4 | 57 | 7.7 | 11 | 6.3 | 167 | 9.4 |
| Medium | 431 | 49.8 | 285 | 38.5 | 43 | 24.4 | 759 | 42.6 |
| High | 336 | 38.8 | 398 | 53.8 | 122 | 69.3 | 856 | 48.0 |
| TOTAL | 866 | 100.0 | 740 | 100.0 | 176 | 100.0 | 1782 | 100.0 |

$X^2 = 60.00$, $D/F = 4$, $P < .001$, $\bar{C} = .24151$

TABLE XXII

Mother's Educational Level and Educational Aspirations of High School Youth

| Educational Aspirations | Mother's Educational Level | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | Public School | | High School | | Above High School | | TOTAL | |
| | No. | % | No. | % | No. | % | No. | % |
| Low | 86 | 12.9 | 78 | 7.3 | 3 | 2.7 | 167 | 8.1 |
| Medium | 352 | 53.0 | 431 | 40.7 | 22 | 20.0 | 805 | 43.8 |
| High | 227 | 34.1 | 551 | 52.0 | 85 | 77.3 | 863 | 48.1 |
| TOTAL | 665 | 100.0 | 1060 | 100.0 | 110 | 100.0 | 1835 | 100.0 |

$X^2 = 79.85$, $D/F = 4$, $P < .001$, $\bar{C} = .27703$